APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,077	07/02/2001	Thomas V. Johnson	06502.0323	9092

22852 7590 05/05/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP	GODDARD, BRIAN D	
901 NEW YORK AVENUE, NW	ART UNIT	PAPER NUMBER
WASHINGTON, DC 20001-4413	2161	

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/895,077	JOHNSON ET AL.
	Examiner	Art Unit
	Brian Goddard	2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _05 January 2005_.

2a)☒ This action is **FINAL**.　　2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,2,4-11,13-22,24-29,31-33,37,38,40-47 and 49-53_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,2,4-11,13-22,24-29,31-33,37,38,40-47 and 49-53_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _05 January 2005_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This communication is responsive to the Amendment filed 05 January 2005.

2.   Claims 1, 2, 4-11, 13-22, 24-29, 31-33, 37, 38, 40-47 and 49-53 are pending in

this application. Claims 1, 6, 9-11, 14-18, 21, 26, 29, 32-33, 37, 42, 45-47 and 50-53

are independent claims. In the Amendment filed 05 January 2005, claims 3, 12, 23, 30,

34-36, 39, 48 and 54-56 were cancelled; and claims 1, 4, 6-11, 13-16, 21, 24, 26-29,

31-33, 37, 40, 42-47 and 49-52 were amended. This action is made Final.

Drawings

3.   The drawings (Replacement Sheet for Figure 5C) were received on 05 January

2005. These drawings are acceptable.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

4.   Claims 1, 2, 4-11, 13-22, 24-29, 31-33, 37, 38, 40-47 and 49-53 are rejected

under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,872,973 to Mitchell et

al.

Referring to claim 1, Mitchell discloses a computer-implemented method for

determining a relationship between objects as claimed. See Figures 1-3 and the

corresponding portions of Mitchell's specification for this disclosure. Mitchell teaches "a

computer-implemented method for determining a relationship between objects related to

a common information model [See Figs. 1-3], the objects including at least a first

[Patron Object 102] and second instance [Patron Object 106] and an association [103

('mapper' or 'mapping object')], the method comprising:

creating, for the first instance [e.g. 102], a reverse link [Probe] that defines a

relationship between the first instance and the association [See Figs. 1-2 & Column 8,

lines 10-32], wherein the instance [e.g. 102 or 106] is associated with a first wrapper

[EosConnection (See Column 16, lines 10-26)] defining the reverse link; and

determining a relationship between the first and second instances based on the

reverse link [See Appendix C & Column 14]" as claimed.

Referring to claim 2, Mitchell discloses the method of claim 1, as above, wherein

each association [103] reflects a relationship [See Fig. 1] between a respective

association [association between field elements (e.g. 104 & 107)] and a corresponding

associated object [Patron Object (e.g. 102 & 106)] as claimed.

Referring to claim 4, Mitchell discloses the method of claim 1, as above, wherein

the association [103] represents an instance [EosMapFieldToField] of an association

class [EosMapElement class (See Column 20, line 57 et seq.)] and wherein creating the

reverse link [See above] further includes:

defining a pointer [probe by field or path, termed 'connection descriptor'] in a first

table of the first wrapper that references a second table [See Column 22, line 60 –

Column 23, line 48]; and

defining a pointer ['semantic link'] in the second table ['the table containing the connection descriptor' (See Column 21, line 34 – Column 23, line 48)] that references the instance [EosMapFieldToField (e.g. 103)] of the association class [EosMapElement] as claimed.

Referring to claim 5, Mitchell discloses the method of claim 4, as above, wherein determining a relationship [See Claim 1 above] includes:

collecting a reference [fRightSide] reflecting a relationship between the association [103] and the second instance [106] based on the pointer in the second table [See Column 21, line 34 – Column 23, line 48] as claimed.

Referring to claim 6, Mitchell discloses a method for maintaining reverse links in an object-oriented environment including class instances and associations as claimed. See the discussions regarding claims 1-5 above for the details of this disclosure. Mitchell teaches "a method for maintaining reverse links [probes] in a object-oriented environment [See Figs. 1-3] including class instances [Patron Objects (e.g. 102, 106)] and associations [mappers (e.g. 103)], the method comprising:

for each class instance [Patron Object (e.g. 102)] associated with N instances [EosMapFieldToField objects] of an association class [EosMapElement] that each reference the class instance [mappers whose fLeftSide references the Patron Object 102], wherein N represents an integer value greater than or equal to one [any number of mappers]:

(i)   creating a first level wrapper table [See Claim 4 above] including a pointer [probe] to a second level wrapper table ['the table containing the connection descriptor'

(See Column 21, line 34 – Column 23, line 48)] associated with the association class; and

(ii)   creating N [one entry for each mapper object present in the table] pointers ['semantic links'] in the second level wrapper table [See above & Claim 4] that each reference an individual instance [EosMapFieldToField (e.g. 103)] of the association class" as claimed.

Referring to claims 7 & 8, Mitchell discloses the method of claim 6, as above, wherein new wrappers and pointers are created for new associations on new class instances as claimed. See the discussions regarding claims 4-6 above, and Column 21, line 34 – Column 23, line 48 of Mitchell's specification for the details of this disclosure.

Claim 9 is rejected on the same basis as claims 6-8 above. See the discussions regarding claims 6-8 and the portions of Mitchell's specification cited therein for the details of this disclosure.

Referring to claim 10, Mitchell discloses the method for maintaining reverse links as claimed. See the discussions regarding claims 6-8 above for the details of this disclosure. Mitchell teaches a method for maintaining reverse links…[See Claim 6 above], the method comprising:

for each class instance associated with N instances of a first association class…[See Claim 6 above], and X instances [e.g. 104, 107] of a second association class [EosFieldElement] that each reference [See Fig. 1] the class instance…[See Claim 6 above]:

(i)   creating a first level wrapper table...[See Claim 6 above and Column 21,

line 34 – Column 23, line 48 of Mitchell's specification];

(ii)   creating N pointers...[See Claim 6 above]; and

(iii)   creating X pointers ['Dynamic Binding'], in the second level wrapper table

[See Column 21, line 34 – Column 23, line 48] associated with the second association

class, that each reference an individual instance [e.g. 104, 107] of the second

association class [See above] as claimed.

Referring to claim 11, Mitchell discloses the method for performing association

traversals as claimed. See Figures 1-3 and the corresponding portions of Mitchell's

specification, as well as the discussions regarding claims 1-10 above, for the details of

this disclosure. Mitchell teaches a method for performing association traversals...[See

Claims 1-6 above] comprising:

receiving an association traversal request [due to update of or modification to a

Patron Object] for a class instance [Patron Object (e.g. 102, 106)]; and

performing an association traversal process...[See Claims 1-5 above] as

claimed.

Claim 13 is rejected on the same basis as claim 5, in light of the basis for claim

11. See the discussions regarding claims 1, 4-5 and 11 above for the details of this

disclosure.

Claims 14-20 are rejected on substantially the same basis as one or more of

claims 1-11 above, as claims 14-20 repeat limitations of claims 1-11 in various

combinations.

Claims 21-22 and 24-28 are rejected on the same basis as claims 1-2 and 4-8 respectively. See the discussions regarding claims 1-2 and 4-8 above for the details of this disclosure.

Claims 29 and 31-33 are rejected on the same basis as claims 11 and 13-15 respectively. See the discussions regarding claims 11 and 13-15 above for the details of this disclosure.

Claims 37-38, 40-47 and 49-53 are rejected on the same basis as claims 1-2, 4-11 and 13-17 respectively. See the discussions regarding claims 1-2, 4-11 and 13-17 above for the details of this disclosure.

Response to Arguments

5.   Applicants' arguments filed 05 January 2005 have been fully considered but they are not persuasive.

Referring to applicants' remarks on pages 31-32 regarding the Section 102 rejections of claims 1, 21 and 37: Applicants argued that Mitchell does not determine a relationship between first and second patron objects (instances) based on the probe (reverse link).

The examiner disagrees for the following reasons: Applicants summary of the functionality of Mitchell's probes on the bottom of page 31 is accurate. However, the conclusion that Mitchell's probe is not used to "determine a relationship between the first and second instances" does not logically follow. Instead, when a probe on one object [instance] "fires", the relationship between this object and another object is

"determined" as the probe points to the mapper defining this relationship. As stated by applicants on the top of page 32, the mapper (relationship/association) is not visible to either object. Thus, the probe is the link [reverse link] that is used to determine that the relationship exists when the object is changed. Applicants' conclusion does not logically follow from the arguments provided.

Referring to applicants' remarks on page 32 regarding the incorporation of recitations from dependent claims 3, 23 and 39 into claims 1, 21 and 37 respectively: Applicants argued that Mitchell's EosConnection is not a wrapper defining the probe (reverse link).

The examiner disagrees for the following reasons: Applicants have failed to consider key portions of Mitchell's disclosure, instead focusing on an introductory portion that has no bearing on applicants' conclusive assertion. Mitchell's EosConnection class is "a simple wrapper around the RPC calls used in the network connection" as stated in column 16, lines 11-12. Thus, Mitchell's EosConnection class is certainly a "wrapper" as claimed. However, in the remainder of this paragraph (column 16, lines 12-26) and in Appendix I (which is referenced within said paragraph), Mitchell also clearly shows that the EosConnection class wrapper defines and maintains the probes [reverse links]. Therefore, Mitchell does teach that "the instance is associated with a first wrapper defining the reverse link" as claimed.

Referring to applicants' remarks on page 33 regarding the Section 102 rejection of claims 4, 24 and 40: Applicants argued that, "contrary to the Examiner's assertion, the semantic link in the table containing the connection descriptor does not reference an

instance of the EosMapElement class. Instead, the table contains a generic description of connections between classes of objects."

The examiner disagrees for the following reasons: Again, applicants have misinterpreted the reference teachings. Applicants' statement that, "the table referenced by the Examiner is used to initialize the semantic links" is simply incorrect, and unfounded in Mitchell's disclosure. The table is not used to "initialize" the semantic links. Instead, the table itself already **contains** the semantic links as clearly stated by Mitchell in column 22, line 25 et seq. (i.e. "There is an entry for each semantic link...")

The remainder of applicants' arguments substantially repeat logic found in the arguments above. The examiner disagrees for substantially the same reasons.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brian Goddard whose telephone number is 571-272-

4020. The examiner can normally be reached on M-F, 9 AM - 5 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

        Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

bdg
26 April 2005

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